

Amendments to the Claims

Claims 1-41 (Cancelled).

42. (Currently amended) A method of forming a capacitor structure, comprising:

 forming a container construction comprising a first silicon-containing layer around a second silicon-containing layer; the first silicon-containing layer being more heavily doped with conductivity-enhancing dopant than the second silicon-containing layer; the second silicon-containing layer defining an exposed inner periphery of the container and the first silicon-containing layer defining an exposed outer periphery of the container;

 converting at least some of each of the first and second silicon-containing layers to hemispherical grain silicon; the hemispherical grain silicon from the first silicon-containing layer having a smaller average grain size than the hemispherical grain silicon from the second silicon-containing layer;

 forming a dielectric material along the exposed inner and exposed outer peripheries of the container construction, the dielectric material being in direct physical contact with the second silicon-containing layer of the inner periphery and in direct physical contact with the first silicon-containing layer of the outer periphery; and

 forming a conductive material over the dielectric material; the container construction, dielectric material and conductive material together defining at least part of the capacitor structure.

43. (Original) The method of claim 42 wherein the converting comprises:

(1) exposing the at least some of each of the first and second silicon-containing layers to silane gas and a temperature of at least about 550°C for a time of less than or equal to about 2 minutes under a vacuum of less than or equal to about 1×10^{-4} Torr to seed the at least some of each of the first and second silicon-containing layers; and

(2) annealing the seeded layers at a temperature of at least about 550°C for a time of less than or equal to about 3 minutes.

44. (Original) The method of claim 42 wherein the first silicon-containing layer comprises a dopant concentration of at least 10^{20} atoms/cm³.

45. (Original) The method of claim 42 wherein the first silicon-containing layer comprises a dopant concentration that is at least 10^3 fold higher than any dopant concentration in the second silicon-containing layer.

46. (Original) The method of claim 42 wherein the first silicon-containing layer comprises a dopant concentration that is at least 10^5 fold higher than any dopant concentration in the second silicon-containing layer.

47. (Original) The method of claim 42 wherein the first silicon-containing layer comprises a dopant concentration that is at least 10^{10} fold higher than any dopant concentration in the second silicon-containing layer.

48. (Original) The method of claim 42 wherein the second silicon-containing layer is substantially undoped.

Claims 49-73 (Cancelled).